## THE GIR FOREST AND ITS LIONS

BY

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## PART III

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I. THE LION IN BHAVNAGAR (by K. S. D.)

Lions existed all over Kathiawar in ancient times and were still to be found in many parts of the peninsula until the middle of the 19th century. In Bhavnagar territory their main habitat was the Sihor Hills, and the adjacent Ramdhari Hills which run in a north-westerly direction to join the Chotila range, another old haunt of lions. The Ramdhari Hills were studded with low scrub forest, while at Sihor there is a thick well-wooded jungle of mixed thorny trees. These two ranges are of distinct character, and the lions were known as being of the Ramdhari or Sihori type, although there could have been no difference between the two.

Since then the lion has, of course, completely disappeared from these hills; I believe the last was killed at Sihor in the time of Thakore Jaswantsinhji, my great-grandfather. After this it was over 60 years before lions were again seen in the State and that was many miles away from the Sihor Hills, in a small portion of the Kundla district known as the Mytiala Hills, the name being derived from the old village of Mytiala ensconced amidst them. These hills are the eastern terminus of the Gir highland system and are divided from it by the river Dhantarwardi, which is also almost the demarcation line between Bhaynagar and Baroda States. The highest of these hills is between 500 and 1000 feet.

It was here in October 1917 that a lioness and two cubs were recorded as wandering into the territory from the Gir where lions were considered very rare then. These animals stayed but a short time.

Following this occurrence no more lions were recorded until 1920, when Mytiala had another visit, again in October, from a lion, two lionesses and two half-grown cubs. In 1922 two more lions were seen in these hills; after that date we began to have regular yearly visits but so keen were sportsmen to bag them that many of them were shot. At that time, I regret to state, preservation was not strict, nor was it so until the rule of my brother, H.H. the Maharajah Raol Shri Krishnakumarsinhji. This is seen from the records of attempts made to shoot these lions, mostly females, during the minority administration of the present ruler. Nevertheless it is to the credit of R. S. Krishnachandra Kalubha, the then Superintendent of Police who accompanied my father so often on shikar, that a fairly good record was kept.

As years went by, lions mostly females, continued to enter Mytiala but they never stayed in the territory for any length of time. These

animals may well be termed migratory, for, since the forest was so poor in trees and lacking in water, there was no temptation for the animals to remain unless they had made a kill. It was fortunate that the distance of Mytiala from any large city was so great that by the time any rail or road bandobast could be made for a shikar camp the animals had had ample time to slip back into Baroda Gir territory. This used to happen quite often and still does to the present day, as the Mytiala area comprises only six square miles of territory, some of which is bare open hills.

As soon as the first male lions were recorded entering the territory in 1929, His Highness, with great foresight, made a rule preserving the females. Since then no lionesses have been shot. Having bagged such a rare animal, His Highness afforded ample opportunity to his close friends to shoot 'shootable' lions, as they were termed, meaning lions whose front pad measured 3\frac{3}{4} inches or over. It is of interest to

note that some of the lions were shot on foot.

As time advanced, more and more lions entered the Preserve and it was at His Highness's suggestion that an afforestation scheme was begun. The arduous task of dispersal of seeds and watering young plants was entrusted to the Shikar Department. As there seemed to be some possibility of conserving water, three small lakes were also constructed. These proved to be successful in attaining their object except during the very hot months when they dried up. Nevertheless, this water encouraged the growth of vegetation and soon trees and undergrowth flourished. Now, owing to strict preservation and conservation of the forest, the Mytiala Hills form an ideal resort for lions. Moreover, the abundance of natural prey entices lions to stay for long periods, with the result that for the last four or five years it has been possible to find lions there throughout the year, something that would have been considered impossible when we began the scheme.

In the early '30's I could count the trees in each valley: today these valleys are a mass of forest vegetation, a delightful spectacle

during the monsoon when foliage is green and thick.

His Highness possesses an old shooting hut placed on the side of a hill from which there is a magnificent view of the Mytiala Valley, called the 'Door', which is the main abode of the lions: a cart track winds through the jungle to pass Mytiala village. From this hut, which is placed, as it were above the corridor of the valley through which most of the lions enter our territory, one looks over the village of Khambha towards the summit of Nandi Velo, the highest peak to be seen in the area. Mamai Peak of the Mytiala range is close by, and from this the sea is visible beyond Rajula on a clear day.

The preservation of forest and game has given a distinctive character to this part of Bhavnagar territory. Whenever guests asked where our territory ended and that of others began, the invariable reply was that Bhavnagar territory was where trees and game could be

seen—a fact that could not be denied.

The lion as I know him is a magnificent animal. The appearance of a full-maned lion is formidable and one that instils respect. He is by no means aggressive, but from my experience prefers seclusion and resents disturbance. For him the most important question is food, for not everywhere is there sufficient. Owing to heavy population sur-

rounding his home in the Gir, he is disturbed as soon as he leaves the forest. But in spite of this, because he has learnt to know that man seldom has evil intentions towards him, he has become used to the presence of human habitations. The lion of Kathiawar, unlike some African lions, does not look on man as his enemy, except when he is hunted with the gun, and therefore one does not (nowadays) meet with man-eating lions. Moreover, decrepit lions and lionesses seem to die a natural death in solitude when their powers of hunting fail rather

than attack man towards whom they have a natural fear.

Lions, then, are frequently found around human habitations and it is rarely that a family of lions does not call at a nesda1 during the night. This, of course, is to seek for any cattle that have either lagged behind on their way home or have been poorly secured within the nes. Lions, consequently, feed frequently on domestic cattle and are therefore a constant menace. The lion when he preys upon cattle always has, it seems to me, a guilty feeling of theft, for he does not normally show fight if the owners try to drive him away. However, when very hungry, he gets irritated by human interference and displays defiance by roaring and demonstrating. But these attacks cannot be compared with the deliberate cold-blooded charge of a wounded lion. Nevertheless, I have known some cases of over-bold maldharis who have tried to drive a pair of lions from a kill at night, being badly mauled by one of them which was reluctant to part with his meal. Such cases of attack are rare, but when a maldhari has lost one of his most valued possessions he tends to become something of a lion himself!

As a rule a number of men coughing or talking is enough to drive a pride of lions off their kill. From my experience, if a lion has been deprived of his food immediately after killing, he will utter an angry roar and leave the area disgusted. I recollect the case of a heifer that had been killed by a pair of lions, whose carcass was removed in a lorry. When the lions found their meal had been stolen they roared furiously a number of times during the night, but left the jungle before

day-break.

The lion of the Gir may be seen singly, in pairs, or in prides. The largest pride I have seen consisted of nine animals of which two were males; but five or six of varying size with one male lion is not an unusual sight. Solitary males may be seen, but it seems a special characteristic of the Gir lion to move in pairs, generally both males, one usually slightly larger than the other. This unit is locally termed a bélad. I personally believe the two animals find hunting made much easier by their association, a fact I can corroborate from my personal experience. At Mytiala there was a full grown buffalo bull which was always left out in the open at night but was never attacked in the course of many years, and seemed well capable of defying any single lion, or lioness with cubs, until, one fateful night, a bold pair of lions hunting in concert brought him down.

The Gir lion appears to be less courageous than his African brother and is reluctant to attack a full-grown buffalo unaided. However, both single lions and lionesses have been known to bring down full-grown nilgai bulls, and I myself have the record of a lioness that killed a large

bull at Mytiala one season.

<sup>1</sup> Herdsmen's hamlet in the Gir.

Nilgai (Boselaphus tragocamelus) of course, form an important proportion of the game killed by lions for food. There was once a pair of lions living in the Mytiala Hills which regularly used to prey on nilgai with the result that these animals became very wary even during the daytime, keeping to the steep sides and higher ridges of the hills, and taking alarm at the slightest appearance or scent of us. Lions have even been known to bring down nilgai at mid-day during the cooler season, a time when these antelopes suspect little danger. I once watched a herd of day of about that was stopped dead by a pair of them male and then immediately turned and fled in the opposite direction. Fortunately for them the lions were not hungry. Another remarkable spectacle I had the good fortune to see was a nilgai bull following some lions that had been feeding on a kill. The lions made no attempt to attack the nilgai, although he was not fifty yards away, and he seemed aware that they meant him no harm.

Lions have also been known to kill panthers and we had such a

case recently at Mytiala.

Well-fed lions are lazy and will allow close approach. It is during the heat of the day that one comes suddenly upon them whilst they are lying up, and it is then that they, being frightened themselves, show defiance. On such occasions it is best to shout and beat a discreet retreat! A lioness with cubs is still more to be feared, for even though she may be sleeping, the cubs, intrigued by the appearance of this strange new animal, come to investigate. The mother awakening, perhaps finds one of her family missing and comes in search of it, and then finds you whom she suspects of being the thief! On seeing young cubs it is advisable to make off as rapidly as is practicable without waking mother.

A lioness with cubs gives out a nerve-wracking continuous growl. I have watched cubs, with their mother growling thus and twitching her tail as she looked up at me. More than once I expected her to spring at me in my machan (which was not a high one) but fortunately

she decided otherwise.

During a beat I have seen a lioness, deserted by the male which had moved silently away, growling fiercely in defence of her cubs and deliberately biting and pushing them to urge them out of danger. Finally she scattered them and moved on reluctantly. Yet on the other hand I have seen very clearly, in our own jungle, a pride of lionesses

and cubs beaten past the machan at mid-day.

Shikaris know very well the danger of pressing lions too quickly and with too much noise, but if properly managed they give no trouble. Nevertheless, lions vary in temperament individually, and I have known some lions which have only been made to move after much roaring and growling. One lioness was particularly dangerous and created a great fuss whenever our shikaris came across her. She earned herself a name for this, and the shikaris were able to recognise her immediately by her unmitigating behaviour.

Lions, when driven, often give a roar when they get up, and then follow a trail silently, carefully watching the ground ahead of them, often pausing to listen. Males are inclined to amble or run if they are suddenly pressed, while females move more slowly. Lions which have had their companions shot in the Gir are very wary when they

are driven. Their attitude then is to leave the covert as quickly as

possible and to seek the protection of another.

Owing to persecution by maldharis when they have killed cattle, lions seldom return to such kills, and are wont to consume as much of them as they can that night. However, when they have killed away from nesdas in the jungle and are left undisturbed they invariably return to their kills, and I have seen them feeding on one for three consecutive nights. After a kill has been made under such conditions the lion keeps guard over it during the daytime to prevent vultures from feeding on it, often getting up with a growl or roar to rush towards the birds and drive them away. I have even seen a dead vulture near a lion's kill which may well have been killed by a blow from the lion.

After a lion has killed he usually begins to feed from the rear. When the kill has been made by a pride there is much growling and the male

generally feeds first, though this is not always the case.

Unless they are very hungry lions hunt by night, and, being intelligent animals, they normally hunt up-wind.

Although I have never had the good fortune to see lions bring down wild game, evidence supports the theory that a pride on sighting game

often breaks up and silently surrounds the quarry.

Two lions will separate in opposite directions as they catch sight of their prey moving towards them, or they may stalk it by a pincer movement. The last I saw clearly when two lions stalked a heifer which was tied up. The smaller of the two lions, approaching from the front, had come within twenty yards of the heifer when the latter espied him, but the heifer was not sure of what she had seen. The sight was magnificent. The lion was lying low in two feet of grass, peering at the heifer, with only the top of the head, eyes and tip of his nose visible. On becoming aware he had been seen, he froze and kept as still as a rock with his ears pressed down. Every time the heifer gazed in his direction he closed his eyes to a slit lest he betray himself; such is the intelligence of lions. When the heifer looked away, he opened them again and showed intense interest, as if to decide whether to attack or not, but he seemed diffident to do so until the bigger lion appeared from the side somewhat to the rear of the heifer. The heifer wheeling to face the larger lion, was the signal for the younger one to charge, which he did, an action the larger one immediately followed, one seizing the rear of the beast, the other fastening himself onto the throat. The fangs in the throat, one paw on the muzzle and the other on the back of the neck with the weight of the body behind it soon ended its life.

I have known a single well-maned lion thus kill a three-quarters grown heifer in no time: in an instant the animal was lying dead. The lion kills a goat mercilessly and as he seems to bite at any part of its body, I have seen these poor animals die lingering deaths. One extraordinary sight I once witnessed was the extraction of the entire skin of a goat in one movement by a lion, like a glove being removed from the hand. How this was performed I keep wondering to this day.

The lion is silent when hunting but he often emits a roar when close to a nes. This he does to cause panic among the beasts en-

closed inside, and if an animal is so stricken as to break out through the wado or zareba he immediately pounces upon it. Lions wander a great deal during their night vigils and it is not unusual for them to cover fifteen or twenty miles. They have a definite predilection for moving along paths or cart tracks, and often return along the same route.

Lions roar after they have killed and a pride may join in the chorus. A lioness with cubs gives a low moaning roar to call her young, but otherwise she is more silent than the male. A lioness with young cubs emits a continuous low growling if apprehending danger, but if the cubs are half-grown she usually moves silently away with them

following her.

A lioness meaning business looks at one in a menacing way, though without snarling, and may depress her ears, a sure sign of her determination to charge if further encroached upon. I well recollect an incident during a pig beat when two half-grown lion cubs passed us at a distance of only five yards, and a very large lioness, the mother, showed every inclination to charge, but finally changed her mind, when she saw her offspring bounding away safely in the distance.

While an unwounded lion is nothing to be feared, a wounded one is extremely dangerous and should never be approached without adequate precautions. Once a lion has been hit by a bullet he throws himself about, with low pitched roars, and it is at this critical time that fire should be accurate and in succession. Unless he has seen the marksman, he usually attempts to flee or keeps turning in all directions. A lion which is ready to charge gives a roar and raises his tail above his back, the mane also being raised.

The lion is a less cunning beast than the tiger, and hence is more

easily disposed of by the various hunting methods.

Lion shooting from a machan is tame enough as the animal readily comes out into the open, often following a nullah or ravine if there is one close by, whereas on foot he affords good sport.

Though I have seen many lions being killed, only once have I heard a lion giving his death cry. This was a full grown male which, having been shot through the heart and shoulder, ran into a valley,

gave two piercing, moaning roars, and immediately expired.

The usual procedure employed by us in hunting lions is as follows. First of all it is necessary to find the track of a 'shootable' lion which has entered the Reserve: a shootable lion being one with the pad of the forefoot 3\frac{3}{4}" in diameter, measured in dust or river sand where the ground is not so soft as to leave an exaggerated impression. The puggies or trackers soon locate the lion by following his spoor, and it is indeed remarkable how adept they are at following a track across hard dry soil or sometimes even over rock. As the trackers are well acquainted with the habits of lions and know the terrain, they can usually guess accurately where he is going to lie up, and having located the animal even go right up to him whilst he is lying down unaware or asleep.

Once the trackers are hot on the trail they will not give up. As the power of the sun increases they keep close on the heels of the lion knowing that he will soon lie up. Sometimes when following a trail in a valley it is necessary to send scouts, or chadikars as they are called, ahead onto the sides of the valley to spot the animal in front. During the hot weather lions lie up in favourite shady spots and in ravines or caves, and it is then that they are most easily located and approached. But during the monsoon and after it they are inclined to settle themselves on the sides and near or on the summits of hills. The grass then is tall and plentiful and there is much foliage on the trees, so that it is rather difficult to spot them at this time of the year. During the winter, as also during the monsoon, lions are likely to be continually on the move resting only for short intervals, and it is then that one has to depend on experienced trackers. But once the animal has been seen or marked down, a beat may either be arranged with the hunter in a machan, or a bait may be tied up in the evening, the latter being the safer method if the exact whereabouts of the lion is not known. If possible, it is a sound plan to allow a kill to be made before undertaking a beat, for a well-fed lion does not travel far and is easily tracked the next day so that a beat may be arranged with certainty. Even for the safety of a sportsman shooting off the ground, as has often been the case with us, it is better to fire at a well-fed lion rather than at one that is hungry. However, if it is decided to sit up, this is of course best done when the lion has not fed, when there is more chance of his making the kill.

Usually lions eat as much as they can at one sitting and do not always return to their kill the second night. But if they do they usually come late, whereas if they have not returned, then on the third night they are likely to come early to a fresh live bait, since they will

be hungry.

Whether lions will return to a kill depends on several factors—the number of lions, the size of the kill, where and when the kill was made, and lastly on their previous experience. A return visit, as mentioned before is never made to kills near nesses, whereas a kill made in undisturbed forest in the early hours of the morning may even see a lion feeding during the day and keeping guard over it. On the other hand a kill made by a pride in the early evening will in all probability be entirely devoured that night.

When a lion is repeatedly fed in one locality he does not move far and is inclined to become fat and lazy, coming irregularly to the

known kill and acting strangely.

For the hunter, then, the best method of bagging a lion (that is, if he has good trackers) is to arrange a beat after a kill has been made. For complete safety most sportsmen prefer to have a machan built, but if the lion is lying up in a valley it is a good plan to post oneself in an advantageous position well above where the quarry is expected to appear. If the site is well camouflaged, such places are safe enough, provided the shot is not taken head on. The lion seldom looks up and I have often been placed in open machans without being seen. Nevertheless it is better to be well camouflaged as any slight movement may be spotted.

The advantages of shooting at lions during the daytime are, of course, manifold—the target is clear and there is every chance of placing the first and subsequent shots, and, finally there is time,

if necessary, for following up a wounded animal.

Sitting up in the evening is all very well if the lion comes to the kill or tie-up before dark, but personally I regard shooting from machans at night a mug's game, and one that gives every chance of a wounded lion. Still, if skilful trackers are not available and the sportsman is prepared to take a chance, this is a way open to him without much cost or trouble.

A goat is usually tied up together with the heifer to attract the king of beasts by his bleating. The disadvantage of this is that the lion invariably pulls away the goat in his first rush, and may only return to kill the heifer when he has disposed of the goat. The delay then is very trying. Moreover, in the case of one or more lions the hazard of the 'shootable' lion running away with the goat, or a lioness seizing the prey before the male, is considerable, and this hazard is increased during the winter months when the light fades quickly after sunset. Still it is a practice much adopted.

It is my experience that if lions do not come before about 10 p.m. near a nes, they are unlikely to come at all except in the early hours of the morning. Nevertheless, if lions are heard roaring in the neighbourhood it may be well worth the sportsman's while to sit up until midnight, for there is always a possibility of their appearing.

From what I have seen I agree with most observers that, when a lion and lioness are hunting in concert, it is the latter that attacks first. When a male lion approaches a kill in the open I have noticed that he creeps up stealthily; then, standing up and straightening himself, he stretches forward his shapely head and neck with the hair of the mane bristling, and charges. A male lion, if he is not hungry may play with the bait like a cat with a mouse, until the

lioness comes up and kills it.

Lions wander a good deal during the monsoon, and it was at this season and just after it that they first returned to Mytiala. Because cover and water are then plentiful the animals move far from their natural abode, the Gir. Moreover, lions at this season prefer to keep to the hilltops and the valleys close to their summits during the daytime. This is, I believe, to escape from the flies and mosquitoes that infest the steamy valleys and low ground, and perhaps also the disturbance by grasscutters. Lions during the winter months also frequently settle in similar places for their day's rest, often without much shade. This is never the case during the hot weather when they lie up in shady ravines not far from water, and in caves and under trees, especially banyan (Ficus) trees and keramda (Carissa carandas) bushes. At that time of the year, too, lions do not wander far from their accustomed daytime abode, invariably returning to the same patch of jungle, unless hunger drives them further afield and forces them to rest in some unusual cover such as a large clump of euphorbias. When in such cover a lion will not usually leave it without causing trouble.

It has often been observed that a lion will keep with his mate for quite a long time after the birth of her cubs, only leaving her when the cubs are more than two or three months old. The cubs, which, in my experience, number two, three, or four, (occasionally five) remain with their mother for a year or more, and often until she is ready for her next litter. Two mothers with their cubs may join forces, and a third female has been known to join them. Such a group may

be accompanied by an adult male or young males.

During the mating period, which may take place at any time of the year, lions roar frequently and the male and his spouse then go without food for a long time. Curiously enough kills which are made at such times are often left uneaten, and the lion seems to be easily irritated during his honeymoon.

The manes of lions vary considerably. They may be tawny, rufoustawny, tawny and grey, black and tawny mixed with grey, black and gray or rarely even black. An interesting point is that the size of the lion seems to have little relation with the size of the mane. The colour of the coat also varies, some being tawny, others greyish-tawny with a blackish tinge. One skin sent to me by a friend is almost entirely blackish. Dark coated lionesses have also been seen.

Finally size: Rowland Ward gives 10 ft. 1 in. as the record length of an Indian Iion shot by Lord Lamington in the Junagadh Fir. As much reliance cannot be placed on the above, probably Colonel Fenton's record of a 9 ft. 7 in. lion should be allowed to stand until some more reliable figures are produced to take its place.

## APPENDIX

## Records and Measurements<sup>1</sup> of Lions shot in the Mytiala Lion Reserve<sup>2</sup> Forest, Bhavnagar State

	D		Democra
	DATE		DETAILS
Oct.	1920	•••	1 lioness shot by P. A. (Gohelwad) and Capt, Harris.
,,	1922	•••	1 lioness shot by Col. Burke.
Aug.	1926	•••	l lioness shot by K. S. Vijayasinhji.
Sept.	1927		2 lionesses shot by H. H. Palitana.
			2 lionesses shot by R. S. Krishnachandra.
Aug.	1929		2 lionesses shot by H. H. Bhavnagar.
Sept.	1930	•••	1 lion shot by Col, Mosse. Length: 8' 6".
,,	1931		2 lions shot on foot by H. H. Bhavnagar. Length:
			8' 10" and 8' 5".
Nov.	1932		1 lion wounded by R.N.B.
Sept.	1933		1 lion shot by R. S. Dharmakumarsinhji. Length:
			8' 6". Shot on foot.
Jan.	1935	•••	1 lion shot by R. S. Nirmalkumarsinhji. Length:
			8' 7". Height: 39".
Jan.	1938	•••	1 lion shot by R. S. Dharmakumarsinhji. Length:
			8' 10½". Height: 39".
Dec.	1938		
			nagar. Length: 8' 84". Height: 37". Girth:
			48". Tail: 37". Front Pad: 3\frac{3}{4}".

<sup>&</sup>lt;sup>1</sup> All between pegs.

<sup>&</sup>lt;sup>2</sup> Lions residing in the Mytiala Reserve after 1930 may certainly be considered as overflow from the Gir forests.

	DATE		DRTAILS
Jan.	1940	•••	1 lion shot by Yuvraj Saheb of Wankaner and K. S. Chandrabhanusinhji of Wankaner. Length: 8' 6". Height: 38". Front Pad: 3½". Girth: 42". Tail: 33".
Feb.	1940	•••	1 lion shot by Thakore Saheb of Wadhwan, Length: 8' 6". Height: 40". Front Pad: 3 5/8th".
Jan.	1941	•••	1 lion shot by H. H. Bhavnagar. Length: 9'. Height: $40''$ . Girth: $45\frac{3}{4}''$ . Tail: $37''$ . Front Pad: $3\frac{3}{4}''$ .
May	1945	. •••	1 lion shot by H. H. Bhavnagar. Length: 8' 3". Height: 35". Front Pad: 3½". Shot for VE. Day celebrations.
Apr.	1946		2 lions shot by H. H. Bhavnagar. 1st male: Length: 8' 3". Tail: 28½". Front Pad: 3½". 2nd male: Length: 8' 0½". Tail: 36". Front Pad: 3¼" The latter was shot because he was lame and considered dangerous; the former to celebrate VJ Day. (There were 9 lions in the forest on this date, 7 of which were in the beat).
			Some other Records
Dec.	1933	•••	1 lion shot by R. S. Nirmalkumarsinhji at Andhania (Jetpur Gir). Length: 9' 4". Height; 38". Girth: 60".
"	1933	•••	1 lioness and two partially grown cubs (one male; one female) shot by R. N. B. at Andhania. Female; Length: 8' 4". Male cub Length: 6' 7". Female cub: Length: 6' 5".
Apr.	1934		1 lion shot by H. H. Bhavnagar at Sasan (Junagath Gir). Length; 8' $7\frac{1}{2}$ ". Height: 39". Front Pad: $3\frac{1}{4}$ ". Hind Pad: $3\frac{1}{2}$ ".
	1871	•••	1 lion shot by Capt. Trother at Shane. Length: 8' 10". Tail: 35". Height at shoulders: 40". Girth 45".  Lions shot by Colonel Watson, P. A. (end of last century). Two lions: Length: 9' and 9' 1". One lioness: Length: 8' 6".